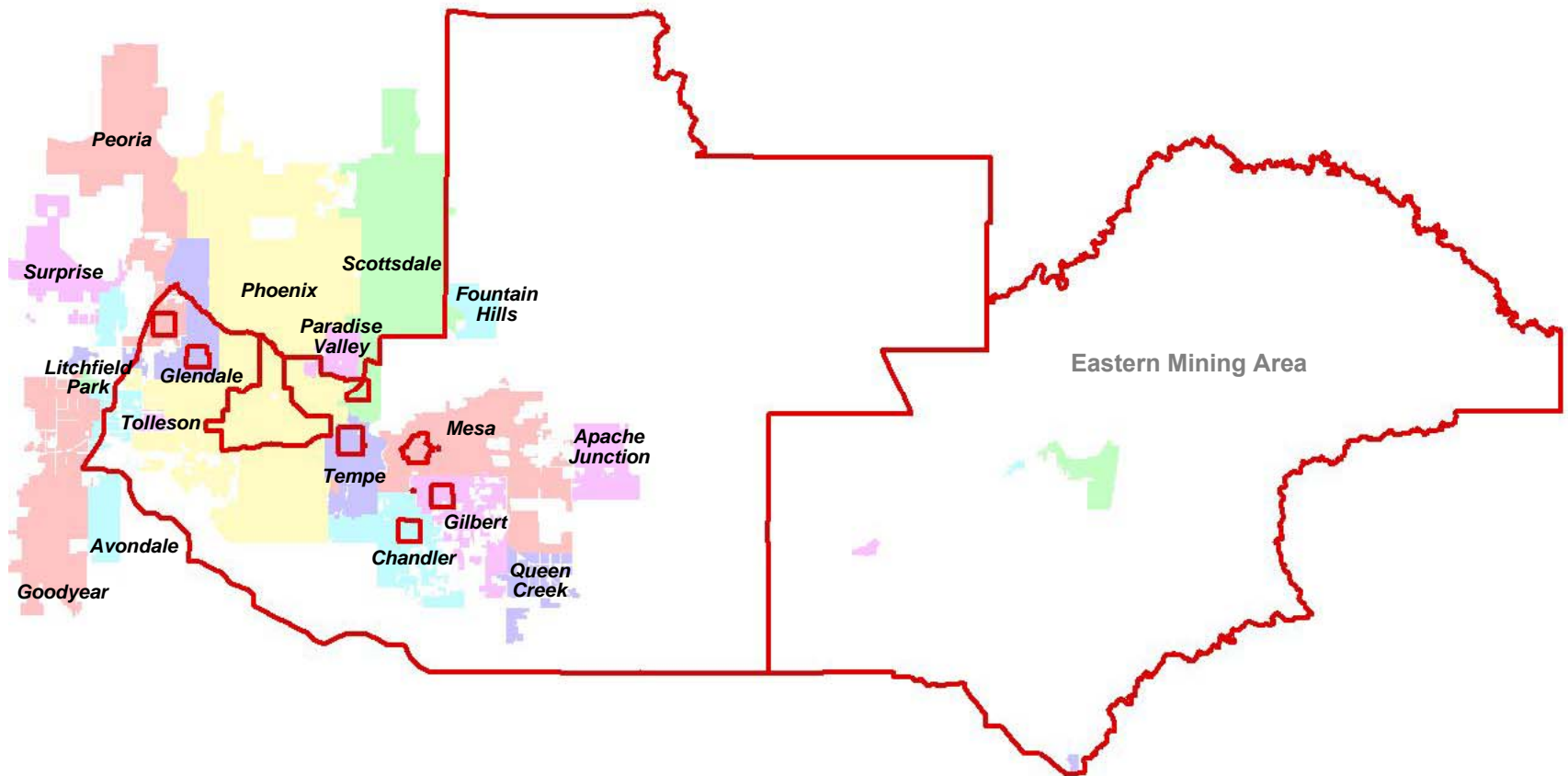


# **SRP Summer Preparedness 2006**

**Mike Hummel  
Manager – Supply and Trading  
and  
Gary Harper  
Manager - System Operations**

**ACC Summer 2006 Energy Preparedness Presentation  
March 30, 2006**

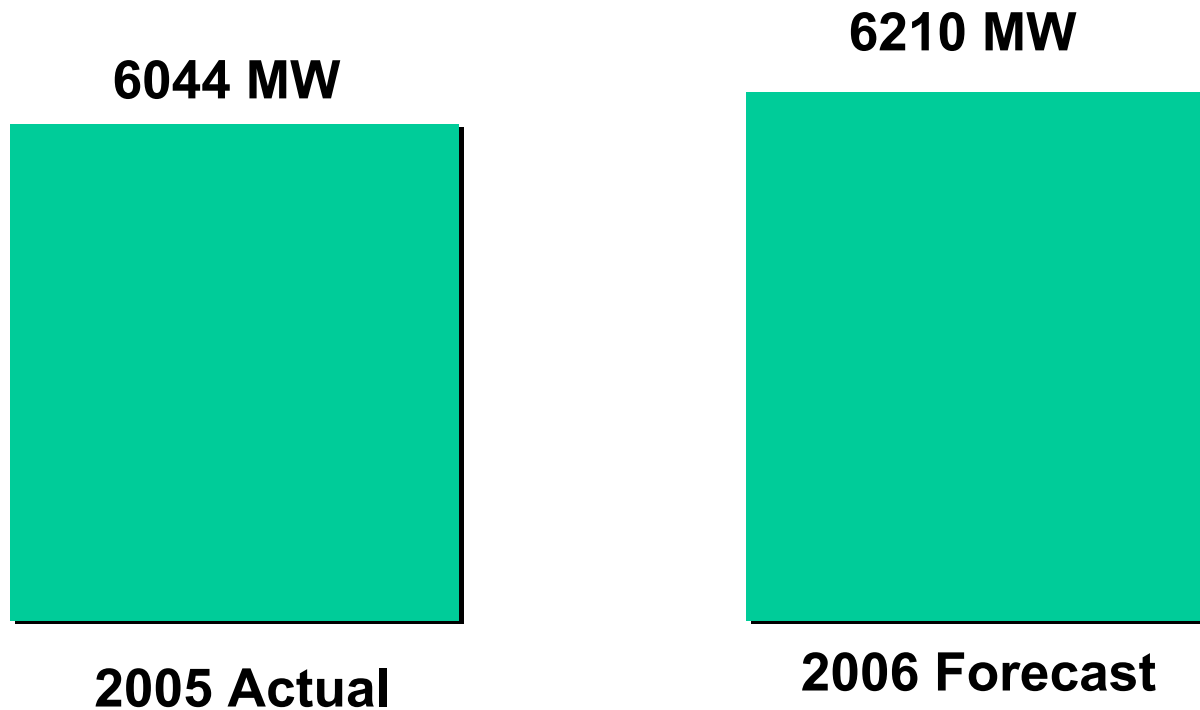
# SRP Electric Service Territory



# Summary

- Peak demand is expected to be higher than last year due to continued growth
- Adequate resources have been secured to meet the anticipated demand
- The effects of potential wildfires have been considered

# Peak Load Forecast



# Summer 2006 Outlook

**Expected  
Need**

**Expected  
Capability**

**888 MW**

**Reserves**

**Purchased  
Power**

**1428 MW**

**6210 MW**

**SRP  
Forecast  
Peak Load**

**SRP  
Generation**

**5670 MW**

***Total 7098 MW    Total 7098 MW***

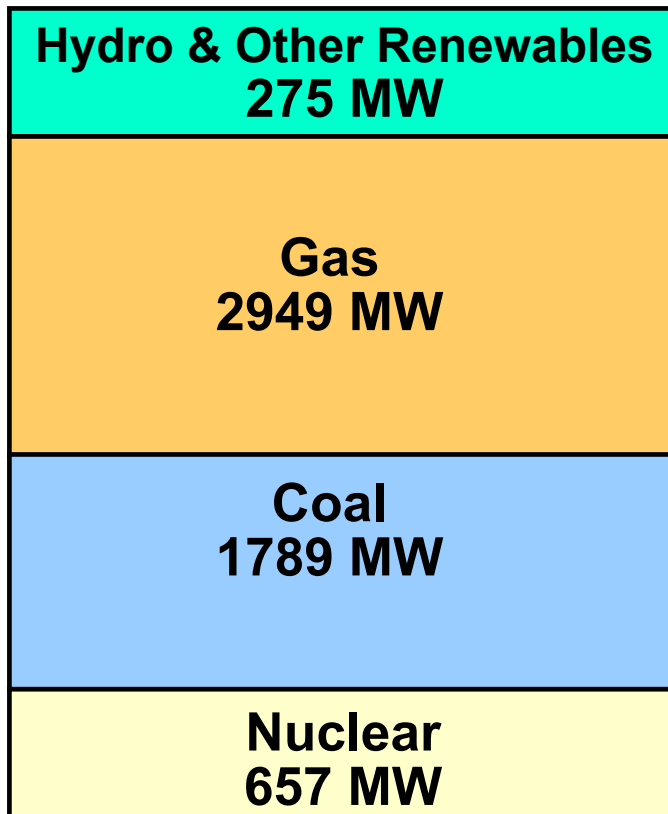
# Reserves

- Provide an immediate response to forced outages
- Quantity is based on NERC and WECC operating criteria and contractual arrangements such as the Southwest Reserves Sharing Group
- A portfolio of resources is utilized to meet the reserve requirements
  - Balances “reliability” and “low cost” objectives

# SRP Owned Generation – 2006

***Total Capacity: 5670 MW***

***New in 2006***



**Santan 6 Addition:  
≈275 MW**

**Mohave Out:  
(280 MW)**

**Net Increased  
Nuclear Capacity:  
10 MW**

# Generation

- All SRP generation is expected to be available for summer peak demand
- Kyrene Units 1 & 2 are available under emergency conditions
- New Springerville Unit 3 expected to begin commercial operation in time to meet peak summer demand. SRP will receive 100 MW through a purchased power agreement



# Purchased Power

- Purchased power portfolio is in place to meet demand
- Additional purchases may be needed to respond to forced unit outages
- Regional market conditions suggest that there will be sufficient capacity to meet the Arizona demand

# Generation Maintenance Completed By Summer 2006

	<u>Units</u>
Agua Fria	1, 2, 3, 4, 5, 6
Coronado	2
Craig	1
Desert Basin	1, 2
Four Corners	4
Hayden	2
Horse Mesa	4
Kyrene	5, 6, 7
Mormon Flat	2
Navajo	3
Palo Verde	1, 3
Santan	1, 2, 3, 4
Stewart Mountain	1

# Fuel Status

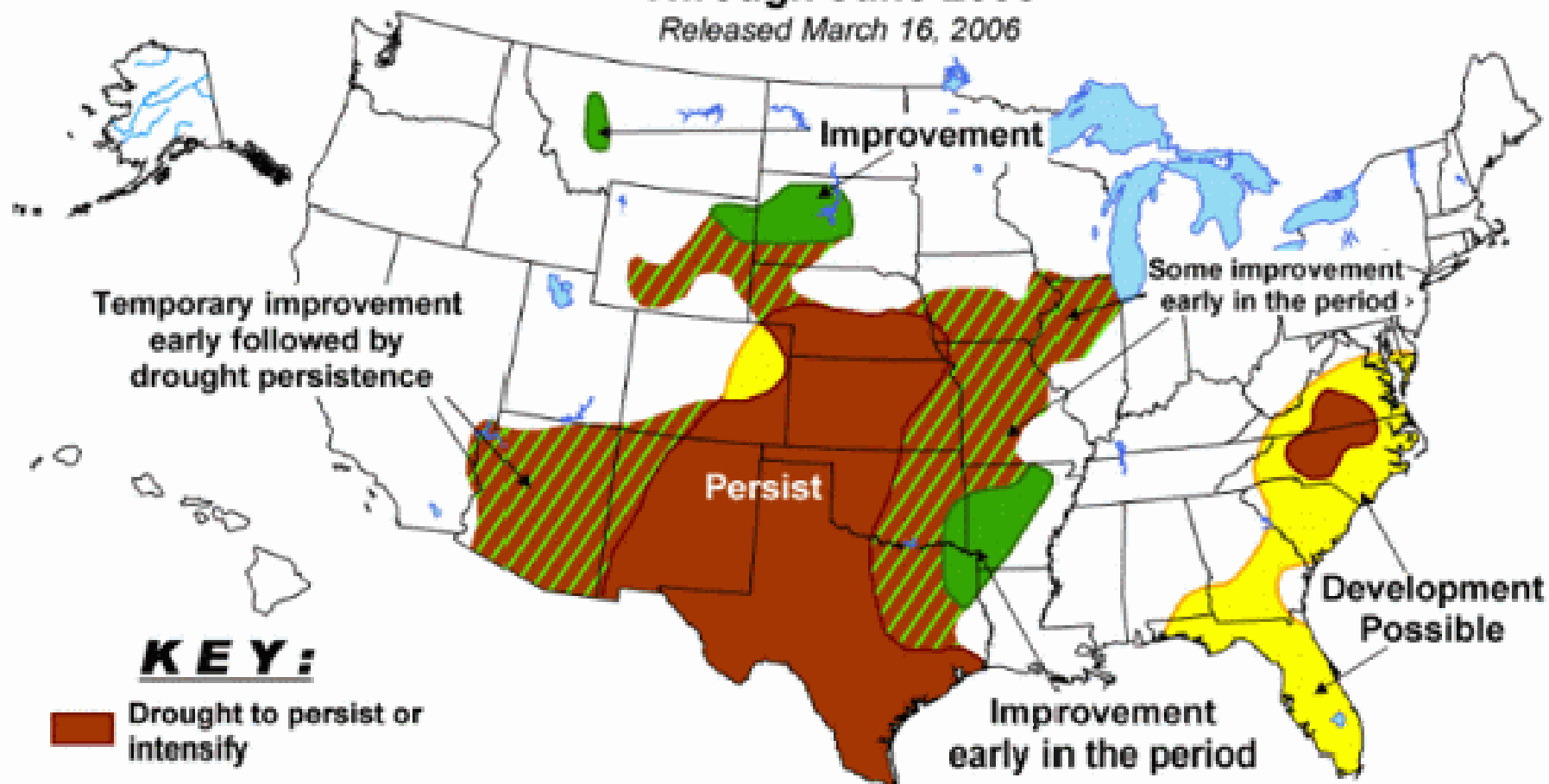
- Nuclear – Full requirements under contract
- Coal
  - Plants expected to be at or above target inventories by summer season
  - Full requirements under contract
- Natural Gas
  - Transportation requirements under contract
  - Retail commodity requirements under contract
  - Distillate fuel back-up






# U.S. Seasonal Drought Outlook

Through June 2006

Released March 16, 2006



## **KEY:**

-  Drought to persist or intensify
-  Drought ongoing, some improvement
-  Drought likely to improve, impacts ease
-  Drought development likely

Depicts general, large-scale trends based on subjectively derived probabilities guided by numerous indicators, including short- and long-range statistical and dynamical forecasts. Short-term events – such as individual storms – cannot be accurately forecast more than a few days in advance, so use caution if using this outlook for applications – such as crops – that can be affected by such events. "Ongoing" drought areas are approximated from the Drought Monitor (D1 to D4). For weekly drought updates, see the latest Drought Monitor map and text. NOTE: the green improvement areas imply at least a 1-category improvement in the Drought Monitor intensity levels, but do not necessarily imply drought elimination.

# Verde & Salt River Reservoirs

03/17/05

91% Full ↑

03/17/06

77% Full ↓

Roosevelt Dam:

- 79% Full
- 17 ft Storage Left

# System Additions

## Stations

NEW	NUMBER
- Distribution Substations	4
- 28MVA 69/12kV Transformers	11
- 230kV Breakers	5
- 69kV Breakers	18
- 69kV Capacitors	128 MVAR

# System Additions Lines

ADDITIONS	NUMBER
- Pole Replacements	560
- Rebuilt/Upgrade 69kV Lines	18.1 Miles
- New Circuit Miles of 69kV Line	14.3 Miles

# System Preparation

Transmission and substation maintenance and training will be complete by summer.

This includes:

- Line patrols/inspections
- Preventative maintenance
- Pole re-enforcement
- Pole change-outs/  
upgrades
- Tree trimming
- Cable replacement
- Storm planning
- Emergency  
procedure training
- Blackstart training



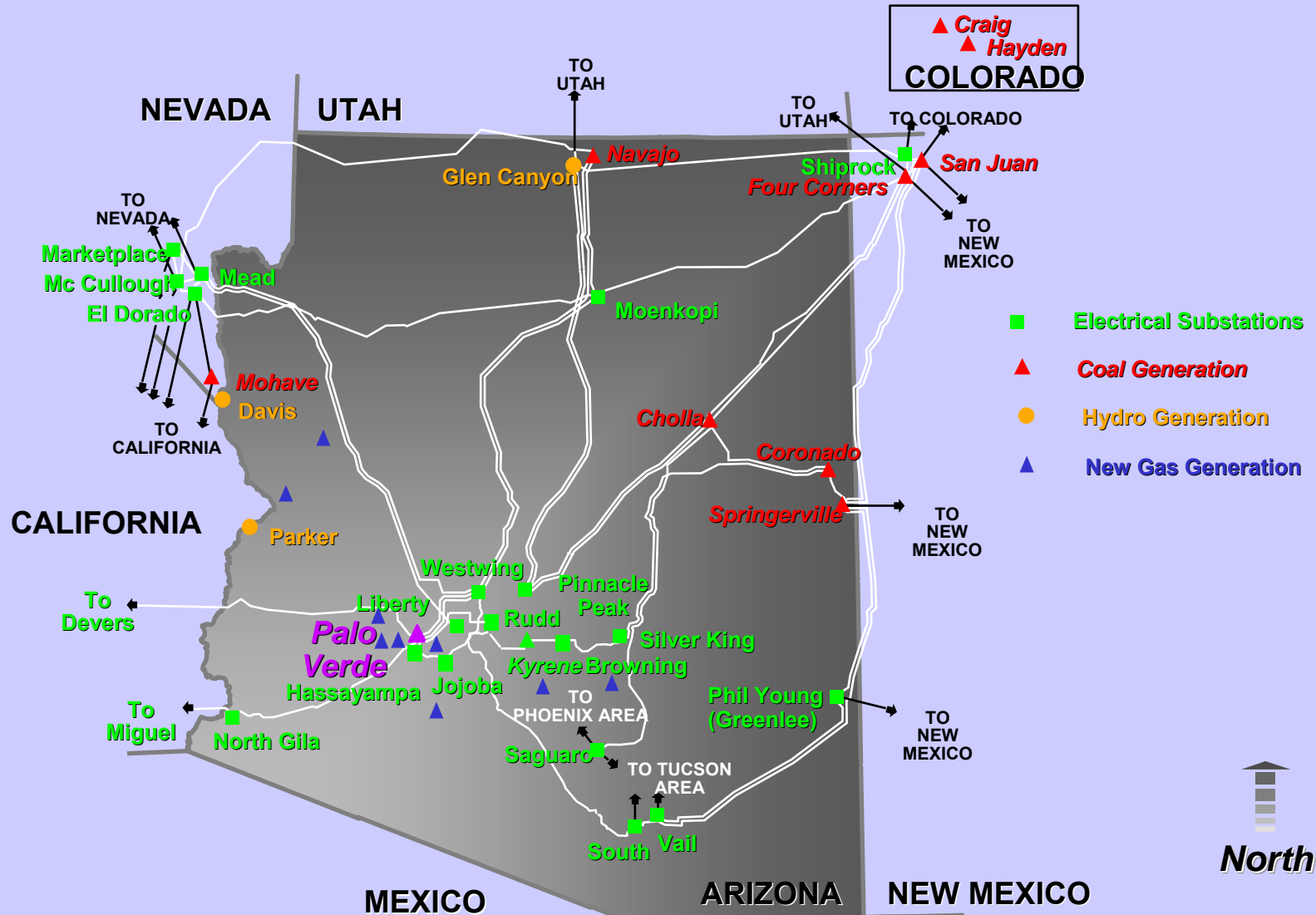
# **SRP/Wildland Fire Coordination**

- Facilities identification and location
- Direct communication between SRP and Agencies
- SRP Advisor Representative on-site
- Firefighting safety information
- Participate in State Drill and Southwest Mutual Assistance Committee

# SRP Electric Facility Fire Fighting

- Support development of Pre-Plan Information for each facility
- Provide Emergency Contact Information for each facility and responding firefighters
- Integrate SRP representatives into Incident Command System management
- Provide firefighter electrical safety awareness and facility orientation training

# Arizona EHV Transmission Systems



# Distribution

- Summer operating procedures reviewed and refresher training provided to O&M personnel
- Seven mobile transformers are available for service if needed
- If required, the process for implementing rotating outages has been automated
  - The planned sequence of substation outages and the duration of each outage is the same as in the past

# Summary of Year 2006 Projected Conditions

- Transmission, SRP generation and planned energy purchases are adequate to serve the forecasted year 2006 demand
- Wildfires are our biggest concern
- Contingency plans are in place to handle emergency events

# Santan Generating Station Units 5 & 6

